

Field Visit Notes: Davidson Canyon

April 20, 2016

Brian Powell and Julia Fonseca

Participants: Julia Fonseca, Brian Powell, Robert Leidy, Evan Canfield

We left Tucson at 11:00 to visit the portion of Davidson Canyon designated as an Outstanding Arizona Waters. To access the site, we drove along the gas pipeline road, south of Interstate 10. The route is shown in red, the outline of Bar-V ranch is in light blue.

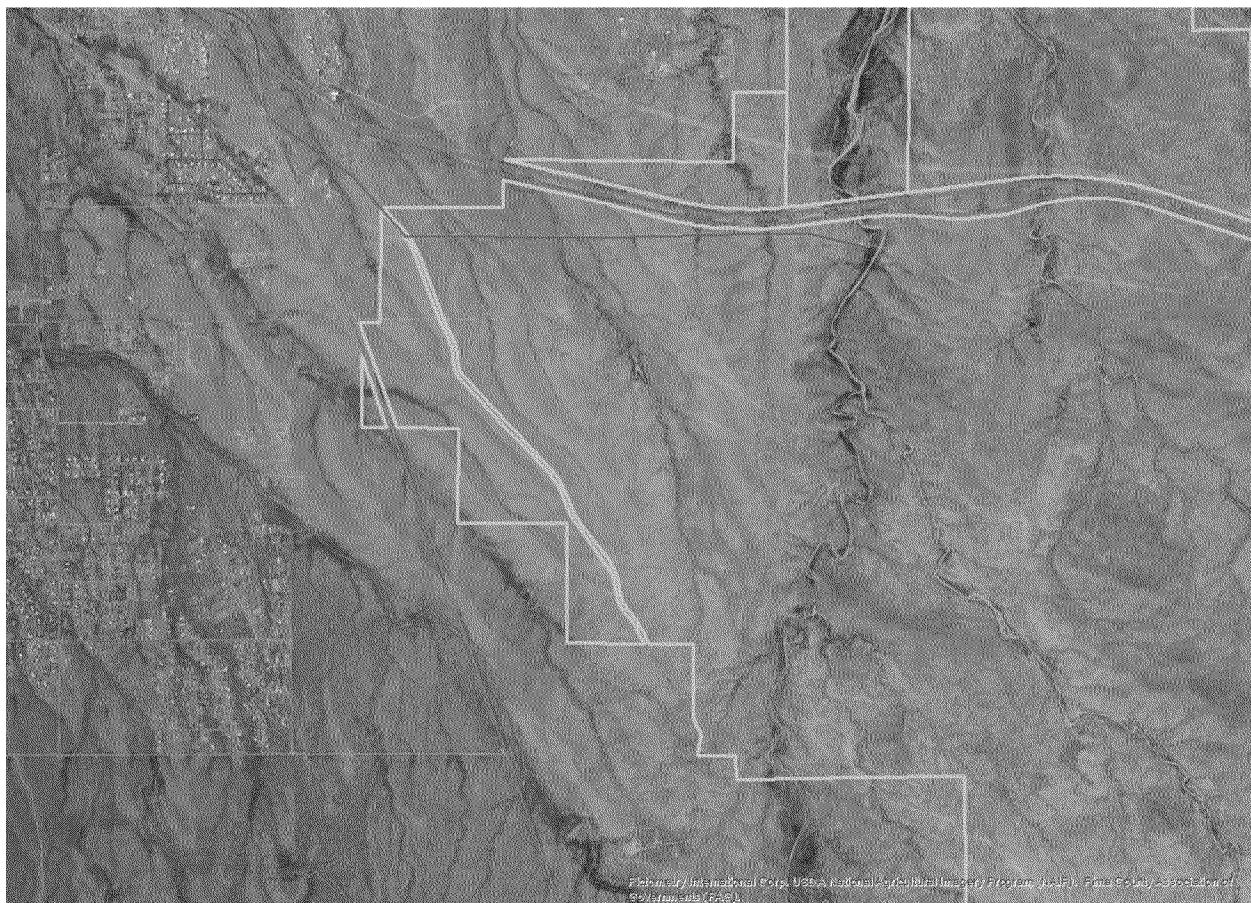


Figure 1. Route taken to access Davidson Canyon.

We parked on a terrace in Davidson Canyon and hiked upstream to the end of the County boundary, observing a number of important features along the way including the ALERT station, nearby Davidson2 well, a wetted reach, wetland plants, and riparian vegetation.



Figure 2. Davidson 2 well (right side of image).

We encountered a 111m section of the canyon that was flowing. The start and stop points of the flow were (UTM, NAD 83):

Start: 3539274/533267

End: 3539374/ 533261



Figure 3. Wetted stretch of Davidson Canyon. Active flow was observed.

Wetland plants were observed in this section. Data on wetland indicator scores are derived from the [Army Corps of Engineers 2014 NWPF viewer](#) (and based on presence in the Arid West [AW] Region). Wetland plants observed (and collected), included:

- *Veronica peregrina*: Obligate species.
- *Zeltnera calycosa*: Facultative wet species.
- *Mimulus guttatus*: Obligate species.
- *Juncus (if tenuis)*: Facultative wet species.
- *Eleocharis (if montevidensis)*: Facultative wet species.
- *Baccharis salicifolia*: Facultative species.
- *Juncus (if xiphoides)*: Obligate species. Voucher specimen was not collected, due to lack of inflorescence, however the broad leaves arising from an iris-like rhizome are distinctive.

Specimens will be deposited in the University of Arizona herbarium. Previous identifications of *Zeltnera calycosa*, *Baccharis salicifolia*, *Mimulus guttatus*, and *Eleocharis montevidensis* were made for this reach of Davidson Canyon in the original Unique Waters Nomination Report dated January 2005, as submitted by Pima County.



Moist soil and salt buildup

Figure 4. Moist soil above the wash bottom, salt buildup and wetland plants along Davidson Canyon.

The following is the route we took and the segments of flowing water observed.



Figure 5. The orange line shows the route taken during the hike. County land is noted in red. Start and end of active streamflow are also noted. The southern terminus of the hike was at the fence separating the county land and State land.



Figure 6. Bedrock outcrop near the southern end of the County property. Permanent surface water has been noted here in the past and it is believed to be the site where the Arizona Game and Fish Department found longfin dace in 2005.

In 2005.



Figure 6. Gooding's willow (left side of picture), Arizona ash (tall tree in picture) and netleaf hackberry (not pictured), all riparian trees, are common throughout the area we visited.

We ended our trip by driving to the Gabe Zimmerman Trailhead. We hiked down to the confluence of Cienega Creek and Davidson Canyon. Cienega Creek was flowing at the confluence and down at least to the first railroad crossing, which was the terminus of our hike on this day. Lowland leopard frog tadpoles and hundreds of long-fin dace were observed in Cienega Creek.